

Serial Number: 10/030,2013RF Processing Date: 7-15-02Edited by: M. SPENCER

Verified by: _____ (STIC staff)

06/9

ENTERED
SEP 16

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: Added mandatory numeric identifier 42207
to SEQ ID #: 10

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



OIPE

RAW SEQUENCE LISTING

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:24:10

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

3 <110> APPLICANT: Van Rooijen, Gijs
 4 Deckers, Harm
 5 Heifetz, Peter Bernard
 6 Briggs, Steven
 7 Dalmia, Bipin Kumar
 8 Del Val, Greg
 9 Zaplachinski, Steve
 10 Moloney, Maurice
 12 <120> TITLE OF INVENTION: METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND
 RELATED
 13 COMPOSITIONS
 15 <130> FILE REFERENCE: 38814 351B
 17 <140> CURRENT APPLICATION NUMBER: 10/032,201B
 18 <141> CURRENT FILING DATE: 2001-12-19
 20 <160> NUMBER OF SEQ ID NOS: 313
 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 22
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Artificial Sequence
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Primer
 32 <400> SEQUENCE: 1
 33 taccatggct tcggaagaag ga 22
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 22
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Artificial Sequence
 40 <220> FEATURE:
 41 <223> OTHER INFORMATION: Primer
 43 <400> SEQUENCE: 2
 44 gaaagcttaa gccaaagtgtt tg 22
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 36
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Primer
 54 <400> SEQUENCE: 3
 55 ggccagcaca ctaccatgaa tggctctcgaa actcac 36
 57 <210> SEQ ID NO: 4
 58 <211> LENGTH: 28
 59 <212> TYPE: DNA
 60 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:24:10

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

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63 <223> OTHER INFORMATION: Primer
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70 <212> TYPE: DNA
71 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: Primer
76 <400> SEQUENCE: 5
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78 gtgatcgccct gc 72
80 <210> SEQ ID NO: 6
81 <211> LENGTH: 80
82 <212> TYPE: DNA
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: Primer
88 <400> SEQUENCE: 6
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90 ctcttgtaag aatgctctgc 80
92 <210> SEQ ID NO: 7
93 <211> LENGTH: 22
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Primer
100 <400> SEQUENCE: 7
101 gtggaagctt atggagatgg ag 22
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104 <211> LENGTH: 1002
105 <212> TYPE: DNA
106 <213> ORGANISM: Arabidopsis thaliana
108 <400> SEQUENCE: 8
109 atgaatggtc tcgaaactca caacacaagg ctctgtatcg taggaagtgg cccagcggca 60
110 cacacggcgg cgatttacgc agctagggtc gaacttaaac ctcttctctt cgaaggatgg 120
111 atggctaacg acatcgctcc cgggtgggtcaa ctaacaacca ccaccgacgt cgagaatttc 180
112 cccggatttc cagaaggtat tctcggagta gagctcactg acaaattccg taaacaatcg 240
113 gagcgattcg gtactacgat atttacagag acggtgacga aagtcgattt ctcttcgaaa 300
114 ccgtttaagc tattcacaga ttcaaaagcc attctcgctg acgctgtgat tctcgctact 360
115 ggagctgtgg ctaagcggct tagcttcggt ggatctgggt aaggttcttg aggtttcttg 420
116 aaccgtggaa tctccgcttg tgctgtttgc gacggagctg ctccgatatt ccgtaacaaa 480
117 cctcttgccg tgatcgggtg aggcgattca gcaatggag aagcaaactt tcttacaaaa 540
118 tatggatcta aagtgtatat aatccatagg agagatgctt ttagagcgtc taagattatg 600
119 cagcagcgag ctttgtctaa tcctaagatt gatgtgattt ggaactcgtc tggtgtggaa 660
120 gcttatggag atggagaaag agatgtgctt ggaggattga aagtgaagaa tgtgggttacc 720
121 ggagatgttt ctgatttaaa agtttctgga ttgttctttg ctattggtca tgagccagct 780
122 accaagtttt tggatggtgg tggttgagtt gattcggatg gttatgttgt cacgaagcct 840

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

TIME: 10:24:10

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

123 ggtactacac agactagcgt tcccggagtt ttcgctgcgg gtgatgttca ggataagaag 900
 124 tataggcaag ccatcactgc tgcaggaact ggggtgcatgg cagctttgga tgcagagcat 960
 125 tacttacaag agattggatc tcagcaaggt aagagtgatt ga 1002

127 <210> SEQ ID NO: 9

128 <211> LENGTH: 999

129 <212> TYPE: DNA

130 <213> ORGANISM: Arabidopsis thaliana

132 <400> SEQUENCE: 9

133 atgaatggtc tcgaaactca caacacaagg ctctgtatcg taggaagtgg cccagcggca 60
 134 cacacggcgg cgatttacgc agctagggct gaacttaaac ctcttctctt cgaaggatgg 120
 135 atggctaacc acatcgctcc cgggtgtcaa ctcaaccaac caccgcgtga gaatttcccc 180
 136 ggatttccag aaggatttct cggagtagag ctactgaca aattccgtaa acaatcggag 240
 137 cgattcggta ctacgatatt tacagagacg gtgacgaaag tcgatttctc ttcgaaaccg 300
 138 tttaagctat tcacagattc aaaagccatt ctgctgacg ctgtgattct cgctatcgga 360
 139 gctgtggcta agtggcttag ctctgttggg tctgggtgaag ttctcggagg tttgtggaac 420
 140 cgtggaatct ccgcttgtgc tgtttgcgac ggagctgctc cgatattccg caacaaacct 480
 141 cttgcgggtga tcggtggagg cgattctgca atggaagaag caaactttct tacaaaatat 540
 142 ggatctaaag tgtatataat cgataggaga gatgctttta gagcgtctaa gattatgcag 600
 143 cagcgagctt tgtctaattc taagattgat gtgatttggg actcgtctgt tgtggaagct 660
 144 tatggagatg gagaaagaga tgtgcttggg ggattgaaag tgaagaatgt ggttaccgga 720
 145 gatgtttctg atttaaaagt ttctggattg ttctttgcta ttggatcatga gccagctacc 780
 146 aagtttttgg atggtggtgt tgagtttagat tcggatgggt atgttgtcac gaagcctggg 840
 147 actacacaga ctacgcttcc cggagtttcc gctgcgggtg atgttcagga taagaagtat 900
 148 aggcaagcca tcaactgctg aggaactggg tgcattggcg ctttggatgc agagcattac 960
 149 ttacaagaga ttggatctca gcaaggtaag agtgattga 999

151 <210> SEQ ID NO: 10

152 <211> LENGTH: 1002

153 <212> TYPE: DNA

154 <213> ORGANISM: Arabidopsis thaliana

W--> 155 <220> FEATURE:

156 <221> NAME/KEY: CDS

157 <222> LOCATION: (1)...(1002)

158 <223> OTHER INFORMATION: cDNA encoding NADPH thioredoxin reductase

160 <400> SEQUENCE: 10

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 162 Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser
 163 1 5 10 15
 165 ggc cca gcg gca cac acg gcg gcg att tac gca gct agg gct gaa ctt 96
 166 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu
 167 20 25 30
 169 aaa cct ctt ctc ttc gaa gga tgg atg gct aac gac atc gct ccc ggt 144
 170 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly
 171 35 40 45
 173 ggt caa cta aca acc acc acc gac gtc gag aat ttc ccc gga ttt cca 192
 174 Gly Gln Leu Thr Thr Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro
 175 50 55 60
 177 gaa ggt att ctc gga gta gag ctc act gac aaa ttc cgt aaa caa tcg 240
 178 Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser
 179 65 70 75 80

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

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Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

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181 gag cga ttc ggt act acg ata ttt aca gag acg gtg acg aaa gtc gat 288
182 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp
183      85      90      95
185 ttc tct tcg aaa ccg ttt aag cta ttc aca gat tca aaa gcc att ctc 336
186 Phe Ser Ser Lys Pro Phe Lys Leu Phe Thr Asp Ser Lys Ala Ile Leu
187      100      105      110
189 gct gac gct gtg att ctc gct act gga gct gtg gct aag cgg ctt agc 384
190 Ala Asp Ala Val Ile Leu Ala Thr Gly Ala Val Ala Lys Arg Leu Ser
191      115      120      125
193 ttc gtt gga tct ggt gaa ggt tct gga ggt ttc tgg aac cgt gga atc 432
194 Phe Val Gly Ser Gly Glu Gly Ser Gly Gly Phe Trp Asn Arg Gly Ile
195      130      135      140
197 tcc gct tgt gct gtt tgc gac gga gct gct ccg ata ttc cgt aac aaa 480
198 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys
199 145      150      155      160
201 cct ctt gcg gtg atc ggt gga ggc gat tca gca atg gaa gaa gca aac 528
202 Pro Leu Ala Val Ile Gly Gly Gly Asp Ser Ala Met Glu Glu Ala Asn
203      165      170      175
205 ttt ctt aca aaa tat gga tct aaa gtg tat ata atc cat agg aga gat 576
206 Phe Leu Thr Lys Tyr Gly Ser Lys Val Tyr Ile Ile His Arg Arg Asp
207      180      185      190
209 gct ttt aga gcg tct aag att atg cag cag cga gct ttg tct aat cct 624
210 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro
211      195      200      205
213 aag att gat gtg att tgg aac tcg tct gtt gtg gaa gct tat gga gat 672
214 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp
215      210      215      220
217 gga gaa aga gat gtg ctt gga gga ttg aaa gtg aag aat gtg gtt acc 720
218 Gly Glu Arg Asp Val Leu Gly Gly Leu Lys Val Lys Asn Val Val Thr
219 225      230      235      240
221 gga gat gtt tct gat tta aaa gtt tct gga ttg ttc ttt gct att ggt 768
222 Gly Asp Val Ser Asp Leu Lys Val Ser Gly Leu Phe Phe Ala Ile Gly
223      245      250      255
225 cat gag cca gct acc aag ttt ttg gat ggt ggt gtt gag tta gat tcg 816
226 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser
227      260      265      270
229 gat ggt tat gtt gtc acg aag cct ggt act aca cag act agc gtt ccc 864
230 Asp Gly Tyr Val Val Thr Lys Pro Gly Thr Thr Gln Thr Ser Val Pro
231      275      280      285
233 gga gtt ttc gct gcg ggt gat gtt cag gat aag aag tat agg caa gcc 912
234 Gly Val Phe Ala Ala Gly Asp Val Gln Asp Lys Lys Tyr Arg Gln Ala
235      290      295      300
237 atc act gct gca gga act ggg tgc atg gca gct ttg gat gca gag cat 960
238 Ile Thr Ala Ala Gly Thr Gly Cys Met Ala Ala Leu Asp Ala Glu His
239 305      310      315      320
241 tac tta caa gag att gga tct cag caa ggt aag agt gat tga 1002
242 Tyr Leu Gln Glu Ile Gly Ser Gln Gln Gly Lys Ser Asp *
243      325      330
247 <210> SEQ ID NO: 11

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RAW SEQUENCE LISTING

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:24:10

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

248 <211> LENGTH: 333

249 <212> TYPE: PRT

250 <213> ORGANISM: Arabidopsis thaliana

252 <400> SEQUENCE: 11

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253 Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser
254   1               5               10               15
255 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu
256               20               25               30
257 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly
258               35               40               45
259 Gly Gln Leu Thr Thr Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro
260               50               55               60
261 Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser
262 65               70               75               80
263 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp
264               85               90               95
265 Phe Ser Ser Lys Pro Phe Lys Leu Phe Thr Asp Ser Lys Ala Ile Leu
266               100              105              110
267 Ala Asp Ala Val Ile Leu Ala Thr Gly Ala Val Ala Lys Arg Leu Ser
268               115              120              125
269 Phe Val Gly Ser Gly Glu Gly Ser Gly Gly Phe Trp Asn Arg Gly Ile
270               130              135              140
271 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys
272 145              150              155              160
273 Pro Leu Ala Val Ile Gly Gly Gly Asp Ser Ala Met Glu Glu Ala Asn
274               165              170              175
275 Phe Leu Thr Lys Tyr Gly Ser Lys Val Tyr Ile Ile His Arg Arg Asp
276               180              185              190
277 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro
278               195              200              205
279 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp
280               210              215              220
281 Gly Glu Arg Asp Val Leu Gly Gly Leu Lys Val Lys Asn Val Val Thr
282 225              230              235              240
283 Gly Asp Val Ser Asp Leu Lys Val Ser Gly Leu Phe Phe Ala Ile Gly
284               245              250              255
285 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser
286               260              265              270
287 Asp Gly Tyr Val Val Thr Lys Pro Gly Thr Thr Gln Thr Ser Val Pro
288               275              280              285
289 Gly Val Phe Ala Ala Gly Asp Val Gln Asp Lys Lys Tyr Arg Gln Ala
290               290              295              300
291 Ile Thr Ala Ala Gly Thr Gly Cys Met Ala Ala Leu Asp Ala Glu His
292 305              310              315              320
293 Tyr Leu Gln Glu Ile Gly Ser Gln Gln Gly Lys Ser Asp
294               325              330

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297 <210> SEQ ID NO: 12

298 <211> LENGTH: 332

299 <212> TYPE: PRT

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002
TIME: 10:24:11

Input Set : A:\PTOMS.txt
Output Set: N:\CRF3\07152002\J032201B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:101; Xaa Pos. 16,17,38,42,45,54,55,58,66,72,75,79,80,81,94,99,103
Seq#:109; Xaa Pos. 17,38,42,55,58,60,72,107
Seq#:134; Xaa Pos. 21,35
Seq#:245; Xaa Pos. 33,45,46
Seq#:275; Xaa Pos. 9,11
Seq#:287; Xaa Pos. 524
Seq#:288; Xaa Pos. 666
Seq#:290; Xaa Pos. 523
Seq#:293; Xaa Pos. 520
Seq#:294; Xaa Pos. 578
Seq#:295; Xaa Pos. 523
Seq#:296; Xaa Pos. 576
Seq#:300; Xaa Pos. 612
Seq#:303; Xaa Pos. 523
Seq#:304; Xaa Pos. 527
Seq#:307; Xaa Pos. 497
Seq#:309; Xaa Pos. 497
Seq#:312; Xaa Pos. 525
Seq#:313; Xaa Pos. 498

VERIFICATION SUMMARY

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:24:11

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

L:155 M:283 W: Missing Blank Line separator, <220> field identifier
L:529 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:532 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:535 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:731 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:734 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19
L:737 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19
L:850 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
L:940 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:943 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22
L:1145 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24
L:1424 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1427 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27
L:1430 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27
L:1723 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30
L:2056 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33
L:2317 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:2321 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:2326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:4689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0
L:4691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16
L:4693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:32
L:4695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:48
L:4697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:64
L:4699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:80
L:4701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:96
L:4878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16
L:4880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:32
L:4882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:48
L:4884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:64
L:4888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:96
L:5471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:16
L:5473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:32
L:9673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:32
L:11024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0
L:11581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:512
L:11678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:656
L:11831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:512
L:12054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:512
L:12141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:576
L:12220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:512
L:12305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:560
L:12620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:300 after pos.:608
L:12833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:512
L:12912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:512
L:13135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:496
L:13242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:309 after pos.:496
L:13401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:312 after pos.:512

VERIFICATION SUMMARY

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:24:11

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

L:13478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:496

Does Not Comply
Corrected Diskette Needed



OIKE

RAW SEQUENCE LISTING

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:05:14

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

3 <110> APPLICANT: Van Rooijen, Gijs
 4 Deckers, Harm
 5 Heifetz, Peter Bernard
 6 Briggs, Steven
 7 Dalmia, Bipin Kumar
 8 Del Val, Greg
 9 Zaplachinski, Steve
 10 Moloney, Maurice
 12 <120> TITLE OF INVENTION: METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND
 RELATED
 13 COMPOSITIONS
 15 <130> FILE REFERENCE: 38814 351B
 17 <140> CURRENT APPLICATION NUMBER: 10/032,201B
 18 <141> CURRENT FILING DATE: 2001-12-19
 20 <160> NUMBER OF SEQ ID NOS: 313
 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0

ERRORED SEQUENCES

151 <210> SEQ ID NO: 10
 152 <211> LENGTH: 1002
 153 <212> TYPE: DNA
 154 <213> ORGANISM: Arabidopsis thaliana
 156 <221> NAME/KEY: CDS
 157 <222> LOCATION: (1)...(1002)
 158 <223> OTHER INFORMATION: cDNA encoding NADPH thioredoxin reductase
 E--> 160 <400> SEQUENCE: 10

161	atg aat ggt ctc gaa act cac aac aca agg ctc tgt atc gta gga agt	48
162	Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser	
163	1 5 10 15	
165	ggc cca gcg gca cac acg gcg gcg att tac gca gct agg gct gaa ctt	96
166	Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu	
167	20 25 30	
169	aaa cct ctt ctc ttc gaa gga tgg atg gct aac gac atc gct ccc ggt	144
170	Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly	
171	35 40 45	
173	ggt caa cta aca acc acc acc gac gtc gag aat ttc ccc gga ttt cca	192
174	Gly Gln Leu Thr Thr Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro	
175	50 55 60	
177	gaa ggt att ctc gga gta gag ctc act gac aaa ttc cgt aaa caa tcg	240
178	Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser	
179	65 70 75 80	
181	gag cga ttc ggt act acg ata ttt aca gag acg gtg acg aaa gtc gat	288

<2207 mandatory

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

TIME: 10:05:14

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

182	Glu	Arg	Phe	Gly	Thr	Thr	Ile	Phe	Thr	Glu	Thr	Val	Thr	Lys	Val	Asp	
183					85					90					95		
185	ttc	tct	tcg	aaa	ccg	ttt	aag	cta	ttc	aca	gat	tca	aaa	gcc	att	ctc	336
186	Phe	Ser	Ser	Lys	Pro	Phe	Lys	Leu	Phe	Thr	Asp	Ser	Lys	Ala	Ile	Leu	
187				100					105					110			
189	gct	gac	gct	gtg	att	ctc	gct	act	gga	gct	gtg	gct	aag	cgg	ctt	agc	384
190	Ala	Asp	Ala	Val	Ile	Leu	Ala	Thr	Gly	Ala	Val	Ala	Lys	Arg	Leu	Ser	
191				115					120					125			
193	ttc	gtt	gga	tct	ggg	gaa	ggg	tct	gga	ggg	ttc	tgg	aac	cgt	gga	atc	432
194	Phe	Val	Gly	Ser	Gly	Glu	Gly	Ser	Gly	Gly	Phe	Trp	Asn	Arg	Gly	Ile	
195		130					135					140					
197	tcc	gct	tgt	gct	gtt	tgc	gac	gga	gct	gct	ccg	ata	ttc	cgt	aac	aaa	480
198	Ser	Ala	Cys	Ala	Val	Cys	Asp	Gly	Ala	Ala	Pro	Ile	Phe	Arg	Asn	Lys	
199	145					150					155					160	
201	cct	ctt	gcg	gtg	atc	ggg	gga	ggc	gat	tca	gca	atg	gaa	gaa	gca	aac	528
202	Pro	Leu	Ala	Val	Ile	Gly	Gly	Gly	Asp	Ser	Ala	Met	Glu	Glu	Ala	Asn	
203					165					170					175		
205	ttt	ctt	aca	aaa	tat	gga	tct	aaa	gtg	tat	ata	atc	cat	agg	aga	gat	576
206	Phe	Leu	Thr	Lys	Tyr	Gly	Ser	Lys	Val	Tyr	Ile	Ile	His	Arg	Arg	Asp	
207				180						185				190			
209	gct	ttt	aga	gcg	tct	aag	att	atg	cag	cag	cga	gct	ttg	tct	aat	cct	624
210	Ala	Phe	Arg	Ala	Ser	Lys	Ile	Met	Gln	Gln	Arg	Ala	Leu	Ser	Asn	Pro	
211			195					200					205				
213	aag	att	gat	gtg	att	tgg	aac	tcg	tct	gtt	gtg	gaa	gct	tat	gga	gat	672
214	Lys	Ile	Asp	Val	Ile	Trp	Asn	Ser	Ser	Val	Val	Glu	Ala	Tyr	Gly	Asp	
215		210					215					220					
217	gga	gaa	aga	gat	gtg	ctt	gga	gga	ttg	aaa	gtg	aag	aat	gtg	gtt	acc	720
218	Gly	Glu	Arg	Asp	Val	Leu	Gly	Gly	Leu	Lys	Val	Lys	Asn	Val	Val	Thr	
219	225					230					235					240	
221	gga	gat	gtt	tct	gat	tta	aaa	gtt	tct	gga	ttg	ttc	ttt	gct	att	ggg	768
222	Gly	Asp	Val	Ser	Asp	Leu	Lys	Val	Ser	Gly	Leu	Phe	Phe	Ala	Ile	Gly	
223				245						250					255		
225	cat	gag	cca	gct	acc	aag	ttt	ttg	gat	ggg	ggg	gtt	gag	tta	gat	tcg	816
226	His	Glu	Pro	Ala	Thr	Lys	Phe	Leu	Asp	Gly	Gly	Val	Glu	Leu	Asp	Ser	
227				260						265				270			
229	gat	ggg	tat	gtt	gtc	acg	aag	cct	ggg	act	aca	cag	act	agc	gtt	ccc	864
230	Asp	Gly	Tyr	Val	Val	Thr	Lys	Pro	Gly	Thr	Thr	Gln	Thr	Ser	Val	Pro	
231			275					280						285			
233	gga	gtt	ttc	gct	gcg	ggg	gat	gtt	cag	gat	aag	aag	tat	agg	caa	gcc	912
234	Gly	Val	Phe	Ala	Ala	Gly	Asp	Val	Gln	Asp	Lys	Lys	Tyr	Arg	Gln	Ala	
235		290					295					300					
237	atc	act	gct	gca	gga	act	ggg	tgc	atg	gca	gct	ttg	gat	gca	gag	cat	960
238	Ile	Thr	Ala	Ala	Gly	Thr	Gly	Cys	Met	Ala	Ala	Leu	Asp	Ala	Glu	His	
239	305					310					315					320	
241	tac	tta	caa	gag	att	gga	tct	cag	caa	ggg	aag	agt	gat	tga			1002
242	Tyr	Leu	Gln	Glu	Ile	Gly	Ser	Gln	Gln	Gly	Lys	Ser	Asp	*			
243					325											330	

VERIFICATION SUMMARY

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:05:18

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

L:13478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:496

VERIFICATION SUMMARY

DATE: 07/15/2002

PATENT APPLICATION: US/10/032,201B

TIME: 10:05:18

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

L:160 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:10
L:529 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:532 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:535 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:731 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:734 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19
L:737 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19
L:850 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
L:940 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:943 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22
L:1145 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24
L:1424 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1427 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27
L:1430 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27
L:1723 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30
L:2056 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33
L:2317 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:2321 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:2326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:4689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0
L:4691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16
L:4693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:32
L:4695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:48
L:4697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:64
L:4699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:80
L:4701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:96
L:4878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16
L:4880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:32
L:4882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:48
L:4884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:64
L:4888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:96
L:5471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:16
L:5473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:32
L:9673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:32
L:11024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0
L:11581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:512
L:11678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:656
L:11831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:512
L:12054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:512
L:12141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:576
L:12220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:512
L:12305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:560
L:12620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:300 after pos.:608
L:12833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:512
L:12912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:512
L:13135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:496
L:13242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:309 after pos.:496
L:13401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:312 after pos.:512